

OEL 815-64

21 August 1964

**MEMORANDUM FOR: Assistant Director for ELINT**

**SUBJECT : Radio Frequency Induced Changes in Materials**

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1. In February of this year [ ] made a trip to the [ ] to investigate the feasibility of passively determining the presence and frequency of RF signals through material changes, especially biological materials. The technique appeared to have some promise, and OEL recommended that ORD initiate a program along these lines. ORD workload precluded their assuming responsibility in this area, and OEL elected to define further what profitable action might be taken.

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2. [ ] of ORD and I have been working together for the past week or so to determine the nature of the investigations which might be performed, and the firms or agencies which might be capable in this area. [ ] has reviewed some of the literature and believes that the technique might well be feasible, and perhaps easier to accomplish in organic rather than biological materials. We will contact several organizations such as [ ] [ ] to obtain their reaction and/or experience in the technique. At the moment [ ] is out of the country and it may be two or three weeks before we are ready to think about contracting.

3. DAD/IO, by copy of this memorandum, is requested to consider desirable configurations and uses for this technique.

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[ ]  
DAD/S&D

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cc: DAD/IO

ORD [ ]

C/GSD

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